

ABSTRACT

0042        A method for forming electroplating cathode contacts around the periphery of a semiconductor wafer including forming an insulating layer over a conductive layer extending at least around the periphery of a semiconductor wafer substrate; etching a plurality of openings around a peripheral portion of the semiconductor wafer substrate through the insulating layer to extend through a thickness of the insulating layer in closed communication with the conductive layer said conductive area in electrical communication with a central portion of the semiconductor wafer substrate; filling the plurality of openings with metal to form electrically conductive pathways; planarizing the electrically conductive pathway surfaces; and, forming a metal layer over the electrically conductive pathway surfaces to form a plurality of contact pads for contacting a cathode for carrying out an electroplating process.